

### Soil Build-up on Interior Concrete Floors

Material sampled from the surface of the concrete floor inside the building contained total PCBs ranging from 11 ppm (SS8) to 138 ppm (SS103). The PCBs detected included Aroclor 1254 and 1260.

## **4.0 DISCUSSION**

Under 40 CFR 761.61, the US Environmental Protection Agency (EPA) cleanup level for PCB remediation waste (*e.g.*, soils and material with porous surfaces, such as concrete) is  $\leq 1$  ppm in "high occupancy areas." This level is slightly lower than the DEP RAG for residential settings of 2.2 ppm total PCBs. The EPA clean-up level for low occupancy areas is  $\leq 25$  ppm, or  $< 50$  ppm if the area is marked with signs and a fence.

EPA defines high occupancy areas as those in which the occupancy of any individual not wearing dermal and respiratory protection is about 17 hours or more per week (*e.g.*, residential areas or schools). If a cap is constructed over PCB-impacted materials, the clean-up level is  $\leq 10$  ppm in high occupancy areas, and  $\leq 100$  ppm in low occupancy areas.

Soil cleanup options under 40 CFR 761.61 include, among others, excavation and off-site disposal, and capping to prevent contact with site occupants. EPA notes that caps must be constructed of at least 10 inches of compacted soil or 6 inches of concrete or asphalt. EPA provides specifications for cap permeability, plasticity and grain-size characteristics.

Based on the test data for the site, soils were identified at concentrations exceeding the clean-up level for both high and low occupancy areas. These areas include the concrete "cut out" and floor drain in the building basement, soil build-up on building floors, and exterior soils in the vicinity of the floor drain.

## **5.0 CONCLUSIONS**

Based on the data available to date, Jacques Whitford concludes the following:

1. Site investigations by Jacques Whitford and others have not detected impacts by past use and storage of "light" petroleum products such as gasoline, diesel or No. 2 fuel oil. This finding is based, in part, on completion twenty-four test pits by S.W. Cole, and 12 test pits and six hand augers by Jacques Whitford. Lighter petroleum products could contain contaminants with relatively high solubility and associated mobility, such as BTEX and MTBE.
2. A past release of heavy fuel oil at the site (fuel oil No. 6) appears to have been cleaned up in accordance with the goals established by DEP. DEP assigned a Baseline-2 clean-up goal for the release (PID readings of 200-400 ppm). PID screening of soils throughout the site by Jacques Whitford, including the heavy oil spill area, indicated a maximum reading of 8.5 ppm.

3. Past activities at the site do not appear to have resulted in significant heavy metals contamination. Other than arsenic, no metals were identified at concentrations exceeding DEP RAGs for residential sites. Arsenic was detected at concentrations slightly above the residential RAG. Arsenic is naturally occurring in Maine soils and bedrock, and elevated concentrations may not be the result of man-made contamination.
4. Soil-like material on the concrete floor in several areas of the former mill building were found to contain PCBs above EPA clean-up guidelines. PCBs likely originated in any number of former transformers and other electrical equipment used at the site.
5. Soils contaminated with PCBs above EPA and DEP clean-up guidelines are present in soils exposed in a "cut out" in the concrete floor of the building basement, and in a floor drain in the basement. PCBs above EPA and DEP clean-up guidelines are also present in outside soils proximate to the interior floor drain, and in soils sampled from an oil-stained area next to the building.

While delineation of PCBs in soils is not complete, testing suggests that PCB concentrations decrease substantially with depth, and laterally away from the floor drain, concrete "cut out" and oil stained area.

6. The site area is serviced by sanitary sewer and public water supply. Three residences, located about 500 to 1,000 feet northeast of the site, have private wells. These wells are located at an elevation 20 to 40 feet higher than the site and apparently upgradient from the site with respect to groundwater flow.

## **6.0 RECOMMENDATIONS**

Jacques Whitford recommends additional testing of soils in the vicinity of the basement floor drain. While test data to date indicates concentrations decrease with depth and laterally away from the drain, additional sampling is needed to more fully delineate the extent of impacted materials requiring cleanup in accordance with EPA and DEP regulations.

Jacques Whitford recommends removal and collection of soil build-up on the concrete floors inside the former mill building. The material should be segregated based on building floor or area, then tested for proper handling and disposal with respect to PCBs.

Oil-stained concrete floors, wood and other building materials should be considered suspect for PCBs. We understand that such surfaces will be cleaned prior to building demolition proposed as part of site redevelopment. Wastes generated during cleanup activities must be tested for PCBs and managed accordingly.

## Tables

7 Depot Street  
Windham, Maine  
Soil Analytical Results

Analyte	Maine DEP	TP-101	TP-102	TP-102	TP-103	TP-104	TP-107	TP-107	TP-110
Depth of Sample	Residential	8-10'	0-2'	4-6'	0-2'	10-12'	2-4'	8-10'	0-2'
Date Collected	Guideline	8/4/03	8/4/03	8/4/03	8/4/03	8/4/03	8/4/03	8/4/03	8/4/03
<b>DRO (mg/kg)</b>									
DIESEL RANGE ORGANICS		10	NA	NA	NA	U 6.8	NA	9	NA
<b>Metals (mg/kg)</b>									
ARSENIC	10	NA	16	5	11	NA	3	NA	16
BARIUM	10,000	NA	45	98	75	NA	87	NA	81
CADMIUM	27	NA	U 8.78	U 1.00	U 4.69	NA	U 1.06	NA	U 1.00
CHROMIUM	950	NA	266	7	133	NA	18	NA	16
LEAD	375	NA	150	12	164	NA	24	NA	49
MERCURY	60	NA	0	U 0.048	0	NA	0	NA	0
SELENIUM	950	NA	U 8.8	U 1.0	U 4.7	NA	U 1.1	NA	U 1.0
SILVER	950	NA	U 1.5	U 1.5	U 1.5	NA	U 1.6	NA	U 1.5
<b>PCBs (ug/kg)</b>									
AROCLOR-1016	100	NA	NA	NA	NA	NA	NA	NA	NA
AROCLOR-1221	*	NA	NA	NA	NA	NA	NA	NA	NA
AROCLOR-1232	*	NA	NA	NA	NA	NA	NA	NA	NA
AROCLOR-1242	*	NA	NA	NA	NA	NA	NA	NA	NA
AROCLOR-1248	*	NA	NA	NA	NA	NA	NA	NA	NA
AROCLOR-1254	*	NA	NA	NA	NA	NA	NA	NA	NA
AROCLOR-1260	*	NA	NA	NA	NA	NA	NA	NA	NA
Total PCBs (sum of above)	2,200	NA	NA	NA	NA	NA	NA	NA	NA
<b>VOCs (ug/kg)</b>									
METHYLENE CHLORIDE	13,000	17	NA	NA	NA	7	NA	10	NA
TRICHLOROFLUOROMETHANE	*	190	NA	NA	NA	70	NA	68	NA
<b>Other Compounds</b>									
TOTAL SOLIDS (%)	*	73	92	84	88	74	84	80	90

Notes:

\* Regulatory Guideline Not Available

Bold values indicate an exceedance of the Regulatory Guideline

PCBs = Polychlorinated Biphenyls

VOCs = Volatile Organic Compounds

NA = Not Analyzed

VIL\_RESP05119

7 Depot Street  
Windham, Maine  
Soil Analytical Results

Analyte	Maine DEP	TP-111	TP-112	HA-1	HA-2	HA-4	HA-5	HA-6	SS1
Depth of Sample	Residential	2-4'	0-2'	0-0.3'	0-0.3'	1-2'	0.5-1'	0-0.3'	0-0.5'
Date Collected	Guideline	8/4/03	8/4/03	8/4/03	8/4/03	8/4/03	8/8/03	8/4/03	11/25/03
<b>DRO (mg/kg)</b>									
DIESEL RANGE ORGANICS		29	NA	63	NA	2,900	3,300	9,100	NA
<b>Metals (mg/kg)</b>									
ARSENIC	10	NA	22	NA	NA	NA	NA	NA	NA
BARIUM	10,000	NA	251	NA	NA	NA	NA	NA	NA
CADMIUM	27	NA	U 2.21	NA	NA	NA	NA	NA	NA
CHROMIUM	950	NA	55	NA	NA	NA	NA	NA	NA
LEAD	375	NA	338	NA	NA	NA	NA	NA	NA
MERCURY	60	NA	1	NA	NA	NA	NA	NA	NA
SELENIUM	950	NA	U 2.2	NA	NA	NA	NA	NA	NA
SILVER	950	NA	U 1.6	NA	NA	NA	NA	NA	NA
<b>PCBs (ug/kg)</b>									
AROCLOR-1016	100	NA	NA	U 20	U 20	U 18	U 200	NA	U 39.0
AROCLOR-1221	*	NA	NA	U 20	U 20	U 18	U 200	NA	U 39.0
AROCLOR-1232	*	NA	NA	U 20	U 20	U 18	U 200	NA	U 39.0
AROCLOR-1242	*	NA	NA	U 20	U 20	99	U 200	NA	U 39.0
AROCLOR-1248	*	NA	NA	U 20	U 20	U 18	U 200	NA	U 39.0
AROCLOR-1254	*	NA	NA	79	56	530	24,000	NA	89.9
AROCLOR-1260	*	NA	NA	40	U 20	U 18	12,000	NA	U 39.0
Total PCBs (sum of above)	2,200	NA	NA	119	56	629	36,000	NA	90
<b>VOCs (ug/kg)</b>									
METHYLENE CHLORIDE	13,000	U6	NA	NA	NA	NA	NA	6	NA
TRICHLOROFLUOROMETHANE	*	61	NA	NA	NA	NA	NA	48	NA
<b>Other Compounds</b>									
TOTAL SOLIDS (%)	*	84	79	85	83	93	84	96	83.6

Notes:

\* Regulatory Guideline Not Available

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PCBs = Polychlorinated Biphenyls

VOCs = Volatile Organic Compounds

NA = Not Analyzed

VIL\_RESP05120

7 Depot Street  
Windham, Maine  
Soil Analytical Results

Analyte	Maine DEP	SS2	SS3	SS5	SS6	SS7	SS8	SS9
Depth of Sample	Residential	0-0.5'	0-0.5'	0-0.5'	0-0.5'	0-0.5'	0-0.5'	0-0.5'
Date Collected	Guideline	11/25/03	11/25/03	11/25/03	11/25/03	11/25/03	11/25/03	11/25/03
<b>DRO (mg/kg)</b>								
DIESEL RANGE ORGANICS		NA	NA	NA	NA	NA	NA	NA
<b>Metals (mg/kg)</b>								
ARSENIC	10	NA	NA	NA	NA	NA	NA	NA
BARIUM	10,000	NA	NA	NA	NA	NA	NA	NA
CADMIUM	27	NA	NA	NA	NA	NA	NA	NA
CHROMIUM	950	NA	NA	NA	NA	NA	NA	NA
LEAD	375	NA	NA	NA	NA	NA	NA	NA
MERCURY	60	NA	NA	NA	NA	NA	NA	NA
SELENIUM	950	NA	NA	NA	NA	NA	NA	NA
SILVER	950	NA	NA	NA	NA	NA	NA	NA
<b>PCBs (ug/kg)</b>								
AROCLOR-1016	100	U 36.1	U 40	U 39.2	U 48.2	U 33.1	U 54.6	3,210
AROCLOR-1221	*	U 36.1	U 40	U 39.2	U 48.2	U 33.1	U 54.6	U 47.6
AROCLOR-1232	*	U 36.1	U 40	U 39.2	U 48.2	U 33.1	U 54.6	U 47.6
AROCLOR-1242	*	U 36.1	U 40	U 39.2	U 48.2	U 33.1	U 54.6	U 47.6
AROCLOR-1248	*	U 36.1	U 40	U 39.2	U 48.2	U 33.1	U 54.6	U 47.6
AROCLOR-1254	*	500	U 40	44,800	120,000	13,100	11,200	9,590
AROCLOR-1260	*	317	U 40	32,200	53,500	U 33.1	U 54.6	3,540
Total PCBs (sum of above)	2,200	817		77,000	173,500	13,100	11,200	16,340
<b>VOCs (ug/kg)</b>								
METHYLENE CHLORIDE	13,000	NA	NA	NA	NA	NA	NA	NA
TRICHLOROFLUOROMETHANE	*	NA	NA	NA	NA	NA	NA	NA
<b>Other Compounds</b>								
TOTAL SOLIDS (%)	*	83	81.2	80.8	68.5	95.5	90.3	90.4

Notes:

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PCBs = Polychlorinated Biphenyls

VOCs = Volatile Organic Compounds

NA = Not Analyzed

VIL\_RESP05121

7 Depot Street  
Windham, Maine  
Soil Analytical Results

Analyte	Maine DEP	SS10	SS11	SS12	SS13	SS14	SS15	SS101
Depth of Sample	Residential	0-0.5'	0-0.5'	0-0.5'	0-0.5'	0-0.5'	0.5-1.0'	fl. drain
Date Collected	Guideline	11/25/03	11/25/03	11/25/03	11/25/03	11/25/03	11/25/03	1/13/04
<b>DRO (mg/kg)</b>								
DIESEL RANGE ORGANICS		NA	NA	NA	NA	NA	NA	NA
<b>Metals (mg/kg)</b>								
ARSENIC	10	NA	NA	NA	NA	NA	NA	17.5
BARIUM	10,000	NA	NA	NA	NA	NA	NA	126
CADMIUM	27	NA	NA	NA	NA	NA	NA	<0.651
CHROMIUM	950	NA	NA	NA	NA	NA	NA	158
LEAD	375	NA	NA	NA	NA	NA	NA	109
MERCURY	60	NA	NA	NA	NA	NA	NA	<0.243
SELENIUM	950	NA	NA	NA	NA	NA	NA	<3.91
SILVER	950	NA	NA	NA	NA	NA	NA	<2.61
<b>PCBs (ug/kg)</b>								
AROCLOR-1016	100	U 43.9	U 32.2	U 32.5	U 35.1	499	222	<4410
AROCLOR-1221	*	U 43.9	U 32.2	U 32.5	U 35.1	U 43.8	U 37.2	<4410
AROCLOR-1232	*	U 43.9	U 32.2	U 32.5	U 35.1	U 43.8	U 37.2	<4410
AROCLOR-1242	*	U 43.9	U 32.2	U 32.5	U 35.1	U 43.8	U 37.2	<4410
AROCLOR-1248	*	U 43.9	U 32.2	U 32.5	U 35.1	U 43.8	U 37.2	<4410
AROCLOR-1254	*	5,100	U 32.2	U 32.5	135	1770	1170	262,000
AROCLOR-1260	*	U 43.9	U 32.2	U 32.5	U 35.1	532	445	<4410
Total PCBs (sum of above)	2,200	5,100			135	2,801	1,837	262,000
<b>VOCs (ug/kg)</b>								
METHYLENE CHLORIDE	13,000	NA	NA	NA	NA	NA	NA	NA
TRICHLOROFLUOROMETHANE	*	NA	NA	NA	NA	NA	NA	NA
<b>Other Compounds</b>								
TOTAL SOLIDS (%)	*	88.9	92.2	95.3	98.2	84.2	90.5	70.9

Notes:

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PCBs = Polychlorinated Biphenyls

VOCs = Volatile Organic Compounds

NA = Not Analyzed

VIL\_RESP05122

7 Depot Street  
Windham, Maine  
Soil Analytical Results

Analyte	Maine DEP	SS101 (dup)	SS102	SS103	SS104	SS105	SS106	SS107
Depth of Sample	Residential	fl. drain	soil on fl.	soil on fl.	soil on fl.	1'	1.5'	1.3'
Date Collected	Guideline	1/13/04	1/13/04	1/13/04	1/13/04	1/13/04	1/13/04	2/3/04
<b>DRO (mg/kg)</b>								
DIESEL RANGE ORGANICS		NA	NA	NA	NA	NA	NA	NA
<b>Metals (mg/kg)</b>								
ARSENIC	10	NA	NA	NA	NA	13.6	NA	NA
BARIUM	10,000	NA	NA	NA	NA	73.4	NA	NA
CADMIUM	27	NA	NA	NA	NA	<0.714	NA	NA
CHROMIUM	950	NA	NA	NA	NA	32	NA	NA
LEAD	375	NA	NA	NA	NA	212	NA	NA
MERCURY	60	NA	NA	NA	NA	0.25	NA	NA
SELENIUM	950	NA	NA	NA	NA	<4.28	NA	NA
SILVER	950	NA	NA	NA	NA	<2.86	NA	NA
<b>PCBs (ug/kg)</b>								
AROCLOR-1016	100	<31,000	<6680	<29,800	<29,900	NA	<40,900	<2300
AROCLOR-1221	*	<31,000	<6680	<29,800	<29,900	NA	<40,900	<2300
AROCLOR-1232	*	<31,000	<6680	<29,800	<29,900	NA	<40,900	<2300
AROCLOR-1242	*	<31,000	<6680	<29,800	<29,900	NA	<40,900	<2300
AROCLOR-1248	*	<31,000	<6680	<29,800	<29,900	NA	<40,900	<2300
AROCLOR-1254	*	570,000	71,100	138,000	100,000	NA	113,000	120,000
AROCLOR-1260	*	<31,000	<6680	<29,800	<29,900	NA	<40,900	<2300
Total PCBs (sum of above)	2,200	570,000	71,100	138,000	100,000	NA	113,000	120,000
<b>VOCs (ug/kg)</b>								
METHYLENE CHLORIDE	13,000	NA	NA	NA	NA	NA	NA	NA
TRICHLOROFLUOROMETHANE	*	NA	NA	NA	NA	NA	NA	NA
<b>Other Compounds</b>								
TOTAL SOLIDS (%)	*	54.9	92.6	94.9	90.9	68.2	67.1	73.4

Notes:

\* Regulatory Guideline Not Available

Bold values indicate an exceedance of the Regulatory Guideline

PCBs = Polychlorinated Biphenyls

VOCs = Volatile Organic Compounds

NA = Not Analyzed

VIL\_RESP05123

7 Depot Street  
Windham, Maine  
Soil Analytical Results

Analyte	Maine DEP	SS108
Depth of Sample	Residential	0.9'
Date Collected	Guideline	2/3/04
<b>DRO (mg/kg)</b>		
DIESEL RANGE ORGANICS		NA
<b>Metals (mg/kg)</b>		
ARSENIC	10	NA
BARIUM	10,000	NA
CADMIUM	27	NA
CHROMIUM	950	NA
LEAD	375	NA
MERCURY	60	NA
SELENIUM	950	NA
SILVER	950	NA
<b>PCBs (ug/kg)</b>		
AROCLOR-1016	100	<140
AROCLOR-1221	*	<140
AROCLOR-1232	*	<140
AROCLOR-1242	*	<140
AROCLOR-1248	*	<140
AROCLOR-1254	*	9,300
AROCLOR-1260	*	<140
Total PCBs (sum of above)	2,200	9,300
<b>VOCs (ug/kg)</b>		
METHYLENE CHLORIDE	13,000	NA
TRICHLOROFLUOROMETHANE	*	NA
<b>Other Compounds</b>		
TOTAL SOLIDS (%)	*	61.8

Notes:

\* Regulatory Guideline Not Available

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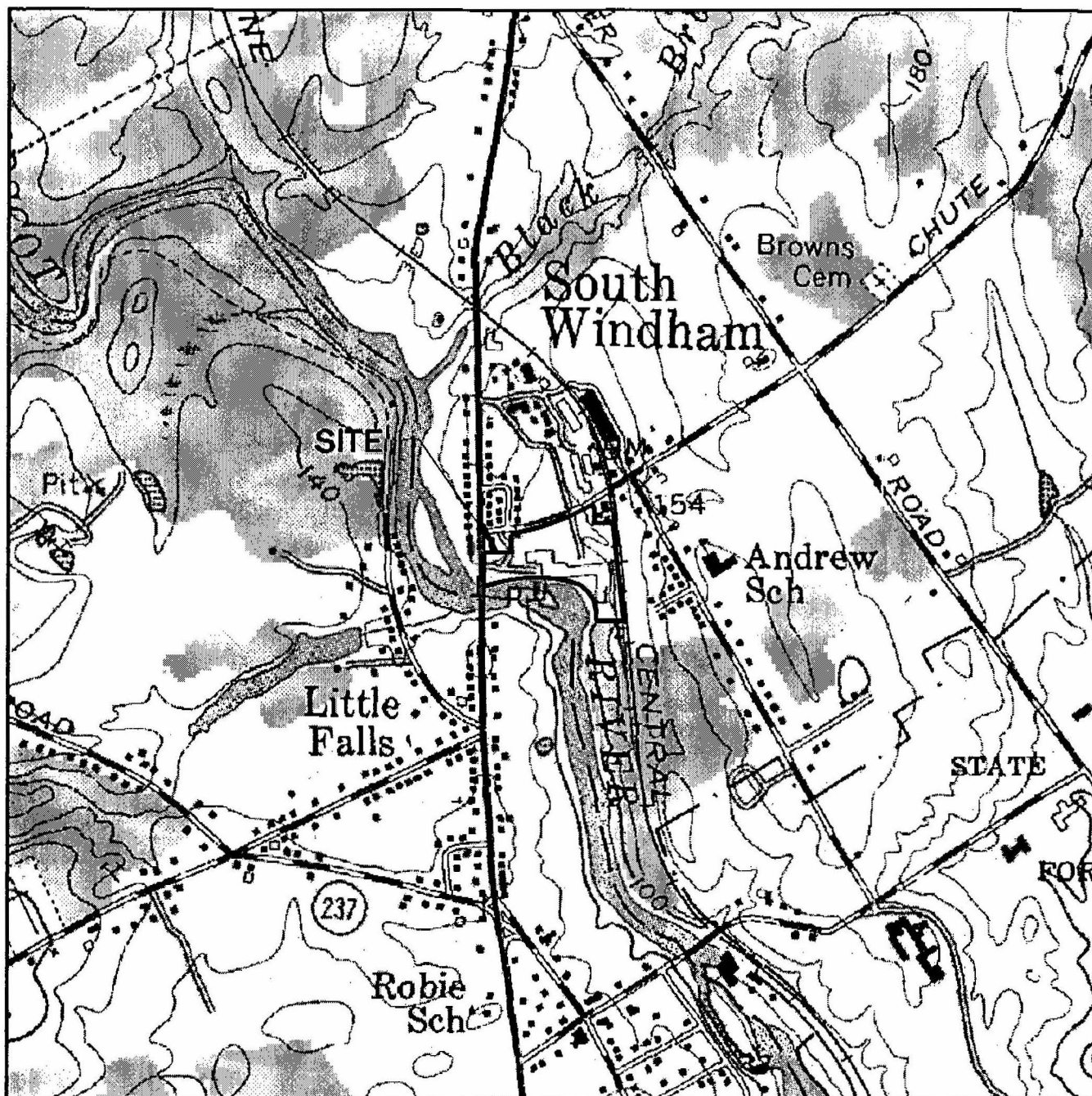
PCBs = Polychlorinated Biphenyls

VOCs = Volatile Organic Compounds

NA = Not Analyzed

VIL\_RESP05124

## **Figures**



MAP SOURCE:

TOPOZONE.COM  
GORHAM, ME  
1970



2000 0 2000

Scale in feet

## Jacques Whitford Company, Inc.



JACQUES WHITFORD LOCATION:  
PORTSMOUTH, NEW HAMPSHIRE

DATE PREPARED: 9-02-03	DESIGNED BY: DVC	DRAWN BY: TS	CHECKED BY: BSB	REVIEWED BY: DVC
REVISION DATE:	REVISION NO:	DRAWN BY:	CHECKED BY:	REVIEWED BY:

PROJECT NAME/FILE NAME:  
7 DEPOT STREET/SITE

PROJECT NUMBER/PHASE:  
MEP03102/\*

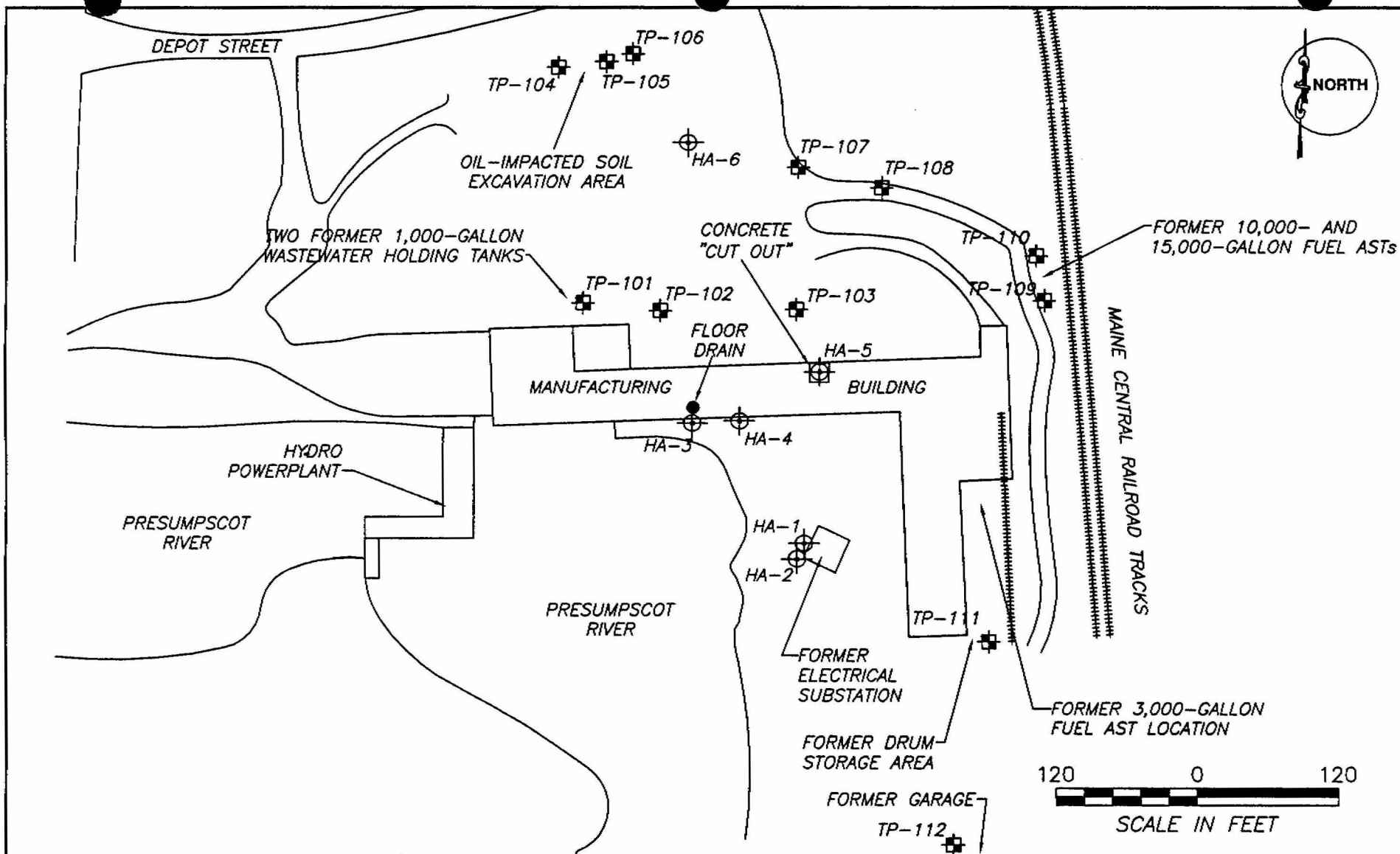
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DRAWING TITLE:

**SITE LOCATION MAP**  
SEVEN DEPOT STREET  
WINDHAM, MAINE

PREPARED FOR:  
RENEE LEWIS

VIL\_RESP05126



### Legend

- HAND AUGER LOCATION
- TEST PIT LOCATION



### Jacques Whitford Company, Inc.

JACQUES WHITFORD LOCATION:  
PORTLAND, MAINE

DATE PREPARED: 9-02-03	DESIGNED BY: DVC	DRAWN BY: TS	CHECKED BY: BSB	REVIEWED BY: DVC
REVISION DATE:	REVISION NO:	DRAWN BY:	CHECKED BY:	REVIEWED BY:

PROJECT NAME/FILE NAME:  
7 DEPOT STREET/SITE

PROJECT NUMBER/PHASE:  
MEP03102/\*

SCALE:  
1"=120'

DRAWING TITLE:

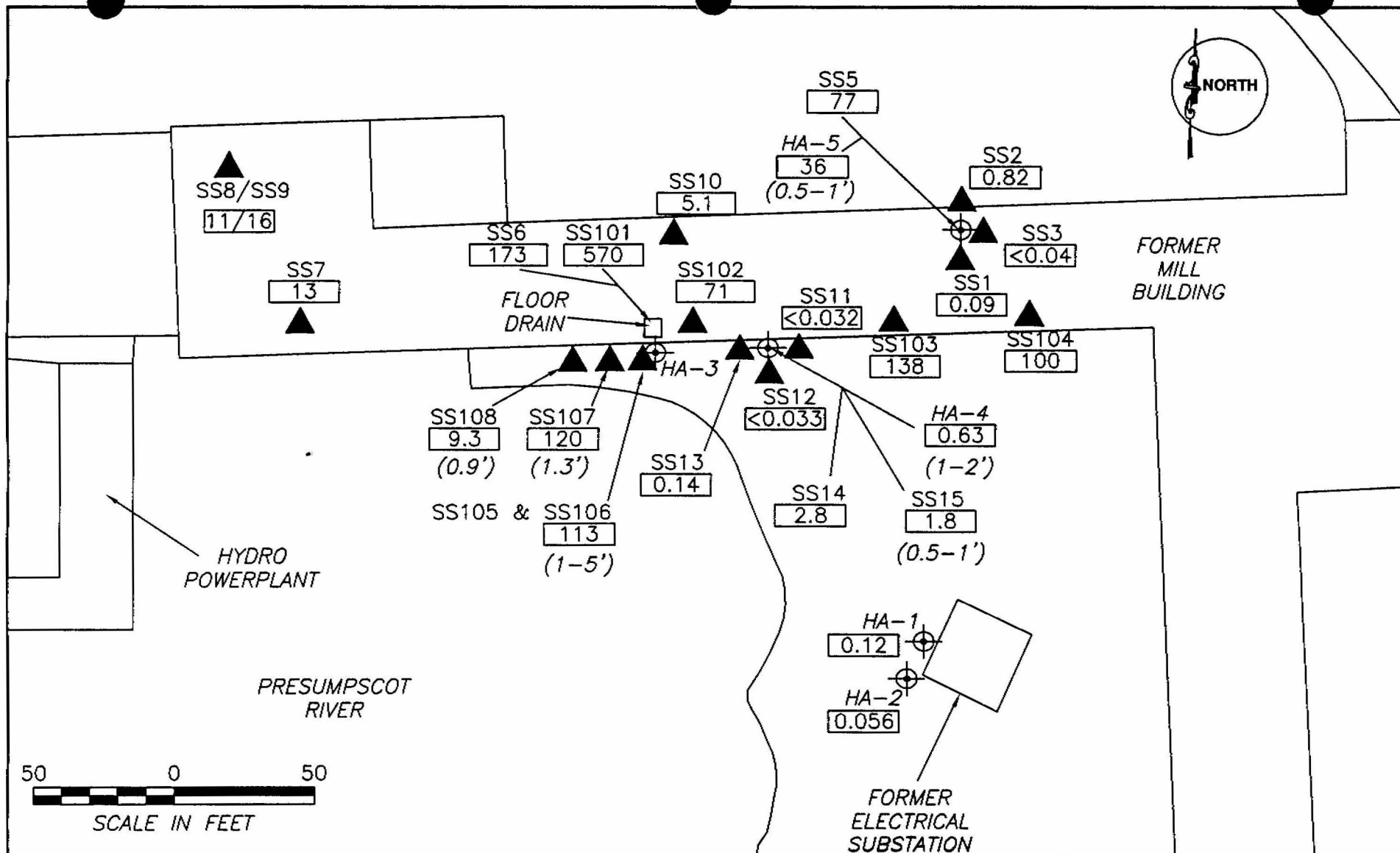
**SITE PLAN**  
SEVEN DEPOT STREET  
WINDHAM, MAINE

PREPARED FOR:  
RENEE LEWIS

FIGURE NO.

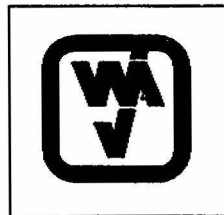
**2**

VIL-OR-SP051127



**Legend**

- HAND AUGER LOCATION
- GRAB SAMPLE LOCATION
- TOTAL PCBs IN mg/kg



JACQUES WHITFORD LOCATION:  
PORTLAND, MAINE

DATE PREPARED: 9-02-03	DESIGNED BY: DVC	DRAWN BY: TS	CHECKED BY: BSB	REVIEWED BY: DVC
REVISION DATE:	REVISION NO:	DRAWN BY:	CHECKED BY:	REVIEWED BY:

PROJECT NAME/FILE NAME:  
7 DEPOT STREET/SITE

PROJECT NUMBER/PHASE:  
MEP03102/\*

SCALE:  
1"=50'

DRAWING TITLE:

**PCB SAMPLE PLAN**  
SEVEN DEPOT STREET  
WINDHAM, MAINE

PREPARED FOR:  
RENEE LEWIS

FIGURE NO.

**3**

**Appendix A**  
**Logs of Test Pits and Hand Augers**

**VIL\_RESP05129**

# TEST PIT EXCAVATION LOG

JACQUES WHITFORD COMPANY, INC

75 Pearl Street, Suite 410

Portland, ME 04101

<b>PROJECT:</b> 7 Depot Street				<b>TESTPIT #:</b> TP-101	
<b>LOCATION:</b> Windham, Maine				<b>DATE:</b> 8/4/03	
<b>EXCAVATION EQUIPMENT</b>				<b>WEATHER:</b> Rain, 70s	
<b>CONTRACTOR</b> Environ Services, Inc.		<b>TIME STARTED</b> 1025		<b>FILE NO:</b> Wintps	
<b>OPERATOR:</b> Peter Lovell		<b>COMPLETED:</b> 1100		<b>JWC REP:</b> D. Chapman	
		<b>GROUND ELEV:</b>			
		<b>DIMENSIONS:</b>			
		<b>LENGTH:</b> 10			
		<b>WIDTH:</b> 4			
		<b>DEPTH:</b> 12			
<b>SAMPLE DEPTH (feet)</b>	<b>SOIL DESCRIPTION</b>	<b>STRATA CHANGE</b>	<b>EXCAVATION EFFORT</b>	<b>PID READING (ppm)</b>	<b>REMARKS</b>
1	Dark brown well graded fine to coarse sand trace silt trace fine gravel to cobbles moist loose. Contains brick, ash, and coal. SW.	Fill	Easy	1.0	
2					
3				3.6	
4					
5				2.8	
6	Dark brown well graded fine to coarse sand trace silt trace fine gravel to stones moist loose. Contains brick ash, coal and layers of red crushed brick. SW.				
7				2.4	
8					
9				8.0	
10					
11				7.9	
12	Bottom of Excavation at 12'. No refusal.				
<b>Remarks:</b> Groundwater observed at 10' below ground surface.					

VIL\_RESP05130

# TEST PIT EXCAVATION LOG

JACQUES WHITFORD COMPANY, INC

75 Pearl Street, Suite 410

Portland, ME 04101

PROJECT: 7 Depot Street				TESTPIT #: TP-102	
LOCATION: Windham, Maine				DATE: 8/4/03	
EXCAVATION EQUIPMENT				WEATHER: Rain, 70s	
CONTRACTOR Environ Services, Inc.		TIME STARTED 1100		FILE NO: Wintps	
OPERATOR: Peter Lovell		COMPLETED: 1130		JWC REP: D. Chapman	
		GROUND ELEV:			
		DIMENSIONS:			
		LENGTH: 10			
		WIDTH: 4			
		DEPTH: 10			
SAMPLE DEPTH (feet)	SOIL DESCRIPTION	STRATA CHANGE	EXCAVATION EFFORT	PID READING (ppm)	REMARKS
1	Dark brown well graded silty fine to coarse sand moist firm with layers of coal. SW.	Fill	Easy	3.9	
2	Light gray well graded sand some fine to coarse gravel moist dense with ash. SW.				
3.5	Reddish brown poorly graded fine to coarse sand moist with bricks. SP.			5.5	
5	Grayish brown poorly graded medium to coarse sand moist with coal and ash. SP.				
6				2.4	
7					
8				7.9	
9					
10				2.1	
11	Bottom of Excavation at 10'. No refusal.				
12					
Remarks: No groundwater observed.					

VIL\_RESP05131

# TEST PIT EXCAVATION LOG

JACQUES WHITFORD COMPANY, INC

75 Pearl Street, Suite 410

Portland, ME 04101

PROJECT: 7 Depot Street				TESTPIT #: TP-103	
LOCATION: Windham, Maine				DATE: 8/4/03	
EXCAVATION EQUIPMENT				WEATHER: Rain, 70s	
CONTRACTOR Environ Services, Inc.		TIME STARTED 1130		FILE NO: Wintps	
OPERATOR: Peter Lovell		COMPLETED: 1200		JWC REP: D. Chapman	
		GROUND ELEV:			
		DIMENSIONS:			
		LENGTH: 12			
		WIDTH: 4			
		DEPTH: 10			
SAMPLE DEPTH (feet)	SOIL DESCRIPTION	STRATA CHANGE	EXCAVATION EFFORT	PID READING (ppm)	REMARKS
1	Yellowish brown to dark brown well graded fine to medium sand moist firm trace silt with some bricks, ash, and cobbles. SM. Contains pockets of brick.	Fill	Easy	0.4	
2				0.7	
3					
4	SAA with layers of coal and ash. SM.				
5	Brayish brown well graded clayey silt trace fine gravel moist firm with timbers, rebar and crushed metal. ML.			1.9	
6					
7				7.7	
8	Yellowish brown poorly graded silty fine to medium sand trace clay moist. Contains cobble-sized bedrock fragments. SM.			4.4	
9					
10	Bottom of Excavation at 10'. No refusal.				
11					
12					
Remarks: No groundwater observed.					

VIL\_RESP05132

# TEST PIT EXCAVATION LOG

JACQUES WHITFORD COMPANY, INC

75 Pearl Street, Suite 410

Portland, ME 04101

PROJECT: 7 Depot Street		TESTPIT #: TP-104			
LOCATION: Windham, Maine		DATE: 8/4/03			
EXCAVATION EQUIPMENT		WEATHER: Rain, 70s			
CONTRACTOR Environ Services, Inc.		FILE NO: Wintps			
OPERATOR: Peter Lovell		JWC REP: D. Chapman			
TIME STARTED 1630					
COMPLETED: 1700					
GROUND ELEV:					
DIMENSIONS:					
LENGTH: 10					
WIDTH: 4					
DEPTH: 12					
SAMPLE DEPTH (feet)	SOIL DESCRIPTION	STRATA CHANGE	EXCAVATION EFFORT	PID READING (ppm)	REMARKS
1	Yellow brown to black poorly graded fine to medium sand with coal ash, pieces of asphalt pavement, cobbles, and wood. SM.	Fill	Easy	2.3	
2					
3				5.2	
4	Grayish brown poorly graded silt some fine to medium sand moist. ML.				
5				4.4	
6					
7				5.3	
8					
9				3.9	
10	Wood observed in sidewall.				
11	Blueish gray poorly graded medium to coarse sand wet firm. SP.	Glaciomarine		4.5	
12	Blueish gray poorly graded silty clay wet. CL. Bottom of excavation at 12'. No refusal.				
Remarks: Groundwater observed at 11' below ground surface.					

VIL\_RESP05133

# TEST PIT EXCAVATION LOG

JACQUES WHITFORD COMPANY, INC

75 Pearl Street, Suite 410

Portland, ME 04101

<b>PROJECT:</b> 7 Depot Street				<b>TESTPIT #:</b> TP-105	
<b>LOCATION:</b> Windham, Maine				<b>DATE:</b> 8/4/03	
<b>EXCAVATION EQUIPMENT</b>				<b>WEATHER:</b> Rain, 70s	
<b>CONTRACTOR</b> Environ Services, Inc.		<b>TIME STARTED</b> 1600		<b>FILE NO:</b> Wintps	
<b>OPERATOR:</b> Peter Lovell		<b>COMPLETED:</b> 1630		<b>JWC REP:</b> D. Chapman	
		<b>GROUND ELEV:</b>			
		<b>DIMENSIONS:</b>			
		<b>LENGTH:</b> 12			
		<b>WIDTH:</b> 4			
		<b>DEPTH:</b> 12			
<b>SAMPLE DEPTH (feet)</b>	<b>SOIL DESCRIPTION</b>	<b>STRATA CHANGE</b>	<b>EXCAVATION EFFORT</b>	<b>PID READING (ppm)</b>	<b>REMARKS</b>
1	Yellowish brown to reddish brown poorly graded fine to medium sand trace silt. Contains wood and ash. SM.	Fill	Easy	1.2	
2					
3				1.5	
4	Yellowish brown to black poorly graded fine to medium sand trace silt with coal and coal ash. SM.				
5	Grayish brown well graded clayey silt some fine to coarse sand mottled moist firm. ML.			2.8	
6					
7				1.8	
8	Olive gray poorly graded clayey silt moist firm. ML.				
9				4.0	
10					
11				3.9	
12	Bottom of excavation at 12'. No refusal.				
<b>Remarks:</b> No groundwater observed.					

VIL\_RESP05134

# TEST PIT EXCAVATION LOG

JACQUES WHITFORD COMPANY, INC

75 Pearl Street, Suite 410

Portland, ME 04101

<b>PROJECT:</b> 7 Depot Street				<b>TESTPIT #:</b> TP-106	
<b>LOCATION:</b> Windham, Maine				<b>DATE:</b> 8/4/03	
<b>EXCAVATION EQUIPMENT</b>				<b>WEATHER:</b> Rain, 70s	
<b>CONTRACTOR</b> Environ Services, Inc.		<b>TIME STARTED</b> 1530		<b>FILE NO:</b> Wintps	
<b>OPERATOR:</b> Peter Lovell		<b>COMPLETED:</b> 1600		<b>JWC REP:</b> D. Chapman	
		<b>GROUND ELEV:</b>			
		<b>DIMENSIONS:</b>			
		<b>LENGTH:</b> 12			
		<b>WIDTH:</b> 4			
		<b>DEPTH:</b> 12			
<b>SAMPLE DEPTH (feet)</b>	<b>SOIL DESCRIPTION</b>	<b>STRATA CHANGE</b>	<b>EXCAVATION EFFORT</b>	<b>PID READING (ppm)</b>	<b>REMARKS</b>
1	Yellowish brown to grayish brown well graded fine to coarse sand trace fine gravel to cobbles with bricks and ash. SW.	Fill	Easy	4.2	
2					
3	Grayish brown mottled silt some fine to coarse sand trace clay with wood (beams). ML.			0.0	
4					
5				3.7	
6					
7				1.2	
8					
9					
10					
11					
12	Bottom of excavation at 12'. No refusal.				
<b>Remarks:</b> No groundwater observed.					

VIL\_RESP05135

# TEST PIT EXCAVATION LOG

JACQUES WHITFORD COMPANY, INC

75 Pearl Street, Suite 410

Portland, ME 04101

<b>PROJECT:</b> 7 Depot Street				<b>TESTPIT #:</b> TP-107	
<b>LOCATION:</b> Windham, Maine				<b>DATE:</b> 8/4/03	
<b>EXCAVATION EQUIPMENT</b>				<b>WEATHER:</b> Rain, 70s	
<b>CONTRACTOR</b> Environ Services, Inc.		<b>TIME STARTED</b> 1200		<b>FILE NO:</b> Wintps	
<b>OPERATOR:</b> Peter Lovell		<b>COMPLETED:</b> 1230		<b>JWC REP:</b> D. Chapman	
		<b>GROUND ELEV:</b>			
		<b>DIMENSIONS:</b>			
		<b>LENGTH:</b> 10			
		<b>WIDTH:</b> 4			
		<b>DEPTH:</b> 10			
<b>SAMPLE DEPTH (feet)</b>	<b>SOIL DESCRIPTION</b>	<b>STRATA CHANGE</b>	<b>EXCAVATION EFFORT</b>	<b>PID READING (ppm)</b>	<b>REMARKS</b>
0.5	Dark brown well graded fine to coars sand	Fill	Easy	4.8	
2	trace silt trace cobbles moist firm. SW				
3.2	Yellow brown to reddish brown well graded				
3.5	fine to coarse sand some semi rounded				
	cobbles moist loose. SW.				
	Layer of red and gray ash with bricks			4.8	
	Grayish brown poorly graded ash.				
5	Grayish brown ash with clayey silt some			4.7	
6	fine gravel moist firm. ML.				
7				2.8	
8	Section of 8" diameter pipe.				
9	Mottled reddish brown and grayish brown	Glaciomarine		6.1	
10	poorly graded clayey silt wet. ML.				
11	Bottom of excavation at 10'. No refusal.				
12					
<b>Remarks:</b> Groundwater observed at 9' below ground surface.					

VIL\_RESP05136

# TEST PIT EXCAVATION LOG

JACQUES WHITFORD COMPANY, INC

75 Pearl Street, Suite 410

Portland, ME 04101

<b>PROJECT:</b> 7 Depot Street				<b>TESTPIT #:</b> TP-108	
<b>LOCATION:</b> Windham, Maine				<b>DATE:</b> 8/4/03	
<b>EXCAVATION EQUIPMENT</b>				<b>WEATHER:</b> Rain, 70s	
<b>CONTRACTOR</b> Environ Services, Inc.		<b>TIME STARTED</b> 1230		<b>FILE NO:</b> Wintps	
<b>OPERATOR:</b> Peter Lovell		<b>COMPLETED:</b> 1300		<b>JWC REP:</b> D. Chapman	
		<b>GROUND ELEV:</b>			
		<b>DIMENSIONS:</b>			
		<b>LENGTH:</b> 10			
		<b>WIDTH:</b> 4			
		<b>DEPTH:</b> 4			
<b>SAMPLE DEPTH (feet)</b>	<b>SOIL DESCRIPTION</b>	<b>STRATA CHANGE</b>	<b>EXCAVATION EFFORT</b>	<b>PID READING (ppm)</b>	<b>REMARKS</b>
0.8	Yellowish brown fine to coarse sand trace silty trace cobbles. SW.	Fill	Easy	2.4	
1	Coal.				
	Light grayish brown poorly graded clayey silt moist firm. ML.				
2	Reddish brown well graded fine to coarse sand some gravel and cobbles. SW.			1.8	
4	Bottom of excavation at 4'.	Bedrock	Refusal		
5					
6					
7					
8					
9					
10					
11					
12					
<b>Remarks:</b> No groundwater observed.					

VIL\_RESP05137

# TEST PIT EXCAVATION LOG

JACQUES WHITFORD COMPANY, INC

75 Pearl Street, Suite 410

Portland, ME 04101

PROJECT: 7 Depot Street				TESTPIT #: TP-109	
LOCATION: Windham, Maine				DATE: 8/4/03	
				WEATHER: Rain, 70s	
EXCAVATION EQUIPMENT		TIME STARTED 1300			
CONTRACTOR Environ Services, Inc.		COMPLETED: 1330		FILE NO: Wintps	
OPERATOR: Peter Lovell		GROUND ELEV:		JWC REP: D. Chapman	
		DIMENSIONS:			
		LENGTH: 10			
		WIDTH: 4			
		DEPTH: 6			
SAMPLE DEPTH (feet)	SOIL DESCRIPTION	STRATA CHANGE	EXCAVATION EFFORT	PID READING (ppm)	REMARKS
1	Yellowish brown poorly graded medium to coarse sand with black coal ash. SP.	Fill	Easy	3.7	
2					
3	Reddish brown to yellowish brown fine to medium sand trace silt moist firm. SM.			0.4	
4					
5	Weathered bedrock.	Bedrock	Moderate	2.1	
6	Bottom of excavation at 6'.		Refusal		
7					
8					
9					
10					
11					
12					
Remarks: No groundwater observed.					

VIL\_RESP05138

# TEST PIT EXCAVATION LOG

JACQUES WHITFORD COMPANY, INC

75 Pearl Street, Suite 410

Portland, ME 04101

<b>PROJECT:</b> 7 Depot Street				<b>TESTPIT #:</b> TP-110	
<b>LOCATION:</b> Windham, Maine				<b>DATE:</b> 8/4/03	
<b>EXCAVATION EQUIPMENT</b>				<b>WEATHER:</b> Rain, 70s	
<b>CONTRACTOR</b> Environ Services, Inc.		<b>TIME STARTED</b> 1330		<b>FILE NO:</b> Wintps	
<b>OPERATOR:</b> Peter Lovell		<b>COMPLETED:</b> 1400		<b>JWC REP:</b> D. Chapman	
		<b>GROUND ELEV:</b>			
		<b>DIMENSIONS:</b>			
		<b>LENGTH:</b> 10			
		<b>WIDTH:</b> 4			
		<b>DEPTH:</b> 6			
<b>SAMPLE DEPTH (feet)</b>	<b>SOIL DESCRIPTION</b>	<b>STRATA CHANGE</b>	<b>EXCAVATION EFFORT</b>	<b>PID READING (ppm)</b>	<b>REMARKS</b>
1	Layer of asphalt under soil.	Fill	Easy	0.0	
2	Medium to coarse sand with brick fragments and coal ash. SP.				
3	Dark brown fine sand tr. silt moist loose. SM	Sand		1.2	
4	Yellow brown fine sand trace silt moist loose. SM.				
5				2.0	
6	Weathered bedrock.	Bedrock	Moderate		
7	Bottom of excavation at 6'.		Refusal		
8					
9					
10					
11					
12					
<b>Remarks:</b> No groundwater observed.					

VIL\_RESP05139

# TEST PIT EXCAVATION LOG

JACQUES WHITFORD COMPANY, INC

75 Pearl Street, Suite 410

Portland, ME 04101

<b>PROJECT:</b> 7 Depot Street				<b>TESTPIT #:</b> TP-111	
<b>LOCATION:</b> Windham, Maine				<b>DATE:</b> 8/4/03	
<b>EXCAVATION EQUIPMENT</b>				<b>WEATHER:</b> Rain, 70s	
<b>CONTRACTOR</b> Environ Services, Inc.		<b>TIME STARTED</b> 1430		<b>FILE NO:</b> Wintps	
<b>OPERATOR:</b> Peter Lovell		<b>COMPLETED:</b> 1500		<b>JWC REP:</b> D. Chapman	
		<b>GROUND ELEV:</b>			
		<b>DIMENSIONS:</b>			
		<b>LENGTH:</b> 10			
		<b>WIDTH:</b> 4			
		<b>DEPTH:</b> 6			
<b>SAMPLE DEPTH (feet)</b>	<b>SOIL DESCRIPTION</b>	<b>STRATA CHANGE</b>	<b>EXCAVATION EFFORT</b>	<b>PID READING (ppm)</b>	<b>REMARKS</b>
1	Grayish brown to dark brown well graded fine to coarse sand trace fine gravel to cobbles with ash. SW.	Fill	Easy	0.2	
2					
3	Yellowish brown to grayish brown poorly graded clayey silt moist firm. ML.			3.1	
4	Bottom of excavation at 4'.	Bedrock	Refusal		
5					
6					
7					
8					
9					
10					
11					
12					
<b>Remarks:</b> No groundwater observed.					

VIL\_RESP05140